

Work Order ID 162403

Tuesday, June 06, 2017 4:57:32 PM

162403

Page 1

Item ID: D2348 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Wearplate (Key Way)
 Start Date: 6/5/2017 Start Qty: 20.00 *20* Cust Item ID:
 Required Date: 6/15/2017 Req'd Qty: 20.00 *20* Customer:
 Reference:

JUN 12 2017

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2348	Rev C								
100	FLOW WATER JET	0.04							
100									
Waterjet	Memo	0.55							
FLOW CNC Waterjet	1-Cut as per Dwg D2348 Dwg Rev: <u>E</u> Prog Rev: <u>E</u> 2-Deburr if necessary								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110									
QC	Memo	0.20							
Quality Control									
120	QC8- Inspect parts - second check	0.00							
120									
QC	Memo	0.40							
Quality Control									

68-8
14
DAS

20

Sc

17/06/26

DAS
14
9-89

20

Sc

17/06/26

DAS
38
9-89

20

JUN 16 2017

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
340 14 PWC								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

DQA: _____ Date: _____



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Work Order update only ☐

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Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

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Page 3

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 *180* Small Fab Small Fab	Small Fab Memo Install Insert as per Dwg D2348	0.00 0.46				<u>20x</u>			<u>17/06/17</u> DAS 36 9-89
190 *190* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.40				<u>20</u>			<u>AUG 14 2017</u> DAS 38 9-89
200 *200* Packaging Packaging	Identify as per dwg & Stock Location: <u>ST006</u> Memo	0.00 0.20				<u>20</u>			<u>AUG 14 2017</u> DAS 6 9-89

DQA: _____ Date: _____

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Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
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Page 4

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210	QC21- Final Inspection - Work Order Release	0.00					DAS 21 9-89		
210									
QC	Memo	2.00							
Quality Control									

AUG 1 5 2017

DAS
21
9-89
AUG 1 4 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐				
Date :	Step #:	QTY Effective :			MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			Completed By	
240 12 36-1 240 12 36-1					Lead hand / Supervisor Approval Verification	
					QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : ☐						

Picklist Print

Monday, June 05, 2017 4:53:47 PM

Page 109

Work Order ID: 162403

162403

Parent Item: D2348

D2348

Parent Item Name: Wearplate (Key Way)

Start Date: 6/5/2017

Required Date: 6/15/2017

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP Rev A Removed from 9 Digit 05-12-05 JLM
IPP Rev:B Now on Waterjet 06-07-03 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3996-FE-832-EF

Manufactured

No

180

Each

161.0000

4

80

D3996-FF-832-FF

Self-Clinching Fastener

**

17/08/14 DAS 36 9-89

Location

Loc Qty

Loc Code

GA

161

156740

11

160667

150

M6061T6S.063

Purchased

No

100

sf

378.4460

0.0198

0.416842

M6061T6S 063

6061-T6 .063 Sheet

**

11/09 DAS 14 9-89 SC 17/06/26

Location

Loc Qty

Loc Code

MAT021

378.446

M134604

51.87

M134830

2.456

M136251

26.2

M136790

9.9

M136896

2.2

M137041

11.22

M137175

27.3

M137513

151.3

M137599

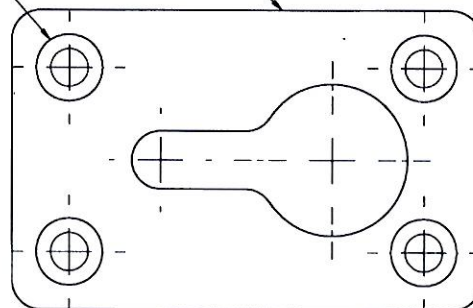
96

0.5

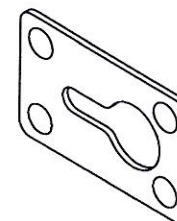
ITEM	QTY -041	P/N	DESCRIPTION
1	X	D2348	WEAR PLATE
2	1	D2348F	FLAT PATTERN
3	4	D3996-FE-832-EF	SELF-CLINCHING FASTENER

D3996-FE-832-EF
SELF-CLINCHING FASTENER
4 PL

D2348F



D2348 WEAR PLATE



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 162903 M.C.S.
1706-18

RELEASED
2009-11-09

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D2348" USING REMOVABLE TAG
- 7) WEIGHT: 0.01 lbs

C	REDRAW, ADD +0.003/-0.000 TOL (ZN D4-2), NCR 08-042	CP	09.10.01
B2	CHANGED BACK TO 6061-T6	DS	02.02.21
B1	CHANGED TO AISI 304/316 MATERIAL	DS	00.03.07
B	CHANGED PEM INSERT TO 8-32	BW	95.02.20
REV.	DESCRIPTION	BY	DATE
DESIGN	BW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D2348 TITLE WEAR PLATE SHEET 1 OF 2 SCALE NTS COPYRIGHT © 1998 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DRAWN	97		
CHECKED	15		
MFG. APPR.	15		
APPROVED	15		
DE APPR.	15		
DATE	09.10.01		

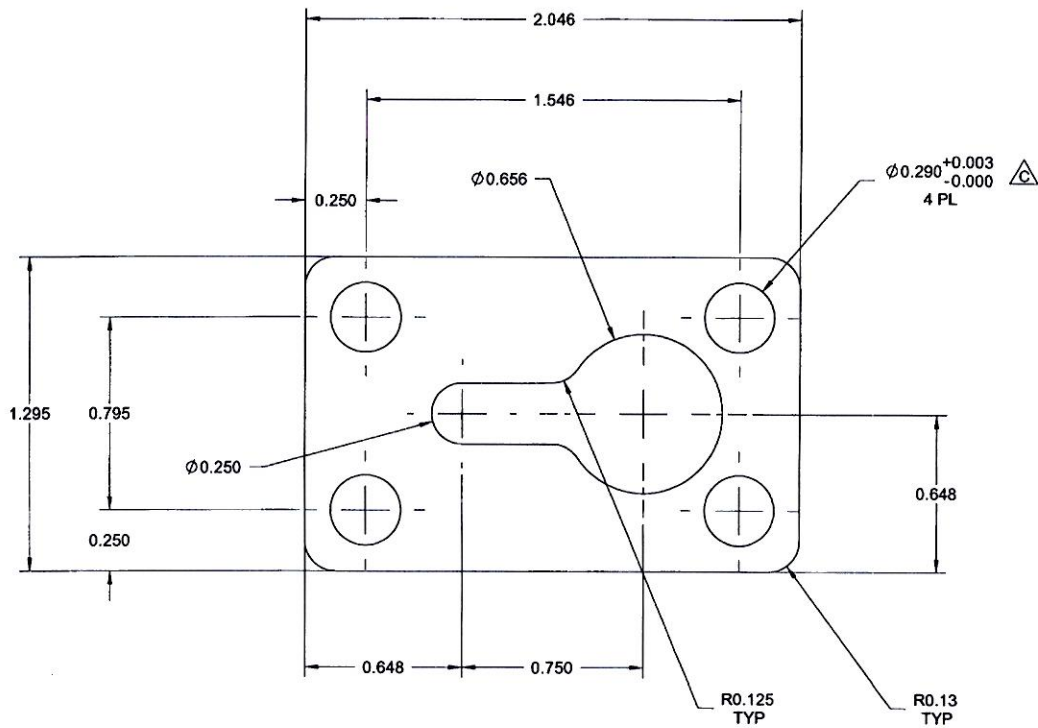
8 7 6 5 4 3 2 1

D

C

B

A



D2348F FLAT PATTERN

RELEASED
2009-11-08

NOTES:

- 1) MATERIAL: 6061-T6 ALUMINUM SHEET 0.063 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209
REF DART SPEC M6061T6S.063
- 2) FINISH: BLACK ANODIZE PER MIL-A-8625F TYPE I/II/III/IV CLASS 2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D2348F" USING REMOVABLE TAG
- 7) WEIGHT: 0.01 lbs

DESIGN	BW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	99		
CHECKED	16	DRAWING NO. D2348	REV. C
MFG. APPR.	ND	SHEET 2 OF 2	
APPROVED	ND	TITLE	SCALE
DE APPR.	ND	WEAR PLATE	NTS
DATE	09.10.01	COPYRIGHT © 1999 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

8 7 6 5 4 3 2 1



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 913642

Date: 08-Aug-17

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Chantal Lavoie
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
20 ea	Part: D2348 Wearplate Black Anodize per MIL-A-8625F, Type II, Class 2, .000007-.0010" (.07 - 1 mils) per Drawing D2055, Rev. D Job: 21378	Rev: C PO: PO37017	Line: 10
CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u>08/08/2017</u> Certified Signature: <u>[Signature]</u> Receiver Signature: <u>[Signature]</u> A.T.G Industries Inc. is AS9100 Registered and Nadcap Chemical Processing Accredited. Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt.			

Made in Canada.



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel 613 632 9577
Fax 613 632 1053

PURCHASE ORDER

Purchase Order ID PO37017

Purchase Order Date 7/12/2017

PO Print Date 7/19/2017

Page Number 5 of 9

Order From

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

VC-AIG001

Ship To: DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone

613.446.4544

Ship To Contact

Ship To Phone

Ship Via

Ship Acct:

VENDOR'S TRUCK

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Diane Baker

10127-2607

Net 30

CAD

FCA - (Free Carrier)

9 161740 647 7810 Bracket A Rev A 7/21/2017 Yes 7/21/2017

6.00

\$14.50

\$87.00

SP17-7-25

AS PER MPP-172 SECTION 2.1,
HARD ANODIZE COLOR BLACK, PER IAW MIL-A-8625 TYPE 3 CLASS 2
AS PER MPP-172 SECTION 4.2,
PRIME AS PER IAW MIL-PR1-23377 TYPE 1 CLASS N

Line Total:

\$87.00

10 162403

D2348 Wearplate (Key
Way) REV C

8/14/2017

Yes

8/14/2017

20.00

\$0.95

\$19.00

AUG 11 2017

FINISH AS PER DWG D2055 REV D, BLACK ANODIZE AS PER MIL-A-8625F TYPE II CLASS 2

Line Total:

\$19.00

11 159046

D5274-1 Step Extrusion
REV A

8/14/2017

Yes

8/14/2017

2.00

\$55.00

\$110.00

FINISH AS PER DWG D2055 REV D, BLACK ANODIZE AS PER MIL-A-8625F TYPE II CLASS 2

SP17-8-9

PO Instructions: PRIMER IS SUPPLIED BY DART

Note:

DAS
38
9-89

7/19/2017